



NOAA Teacher at Sea
James Miller
Onboard NOAA Ship RAINIER
August 13 - 27, 2005

Log 2

Day 2: Sunday, August 14, 2005

Location: In port at Homer, AK Ferry Terminal

Weather: Cloudy, 60's

Science and Technology Log

Most of the day was set aside for administrative duties; however, I did get to meet my temporary roommate, Dave Sinson. Dave works for NOAA as a surveyor and is assigned to the RAINIER for this leg. Dave and I had an interesting discussion about statistics and his goal to integrate a new software algorithm for analyzing and reporting bottom contour and depth data. When bottom contour data is collected, the sonar reports points every 10 centimeters. This, as you can imagine, creates a tremendous amount of data, which explains why their computer system has over 12 terabytes of storage. Anyway, it would be impossible to illustrate all of this data on navigational charts; therefore it must be averaged in the most efficient and accurate way. Apparently, to date, all of this “averaging” has been done by hand and there has been much discussion regarding the best method. In any event, Dave is interested in my knowledge of statistics and I’m obviously interested in hearing more about the new program, in addition to the manual process they are currently using. This has great potential for lessons because next school year I will be teaching a unit on probability and statistics.

I am also getting a grip on the organizational structure of the ship. There are six main departments. You have the Officers (Commanding Officer, Executive Officer, and Junior Officers); Survey Dept. (scientists and survey technicians); Deck Dept. (deals with launching and operating boats, cleaning, and gear); Engineering Dept. (responsible for keeping all the engines and mechanical devices operating); Steward (all food preparation); and Yeoman & Electronics (Administrative and IT).

Personal Log

Although a bit overwhelmed, I’m enjoying every minute. I’m never bored and seem to always have something to do or someone to meet with. When I do have a few minutes I just wander around ship getting more familiar with it, or introduce myself to crewmembers and ask them questions (without being a pest of course).

I did get my ship e-mail address and password for the network. Although, the computers that I have access to are giving me some trouble, which I’ve heard is not uncommon. I lost some files that contained a couple hours worth of work—we’ve all been there—very frustrating. Dave came to the rescue though and gave me a removable

storage chip that I can use to back up all my files. I think this will solve any future issues.

Went into town today to buy some personal things. On the way back, I saw a 311-pound halibut hanging outside of one of the charter boat weigh-in areas. Amazing sight!

The beds are very comfortable and I am sleeping well. Love the food.

Things to do for tomorrow:

- 1) Type my daily logs and e-mail them to NOAA Headquarters.
- 2) Visit the engine room.
- 3) Talk more with Dave regarding his work with the data.